

PLYMOUTH WATER COMPANY RESPONSES TO
FIRST SET OF INFORMATION REQUESTS OF THE
DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY
D.T.E. 06-53

RESPONDENT: Ellen Kitchell
RESPONSE DATE: September 7, 2006

DTE 1-25 Please provide a copy of the most recent comprehensive compliance evaluation performed on Plymouth by the Massachusetts Department of Environmental Protection ("DEP").

RESPONSE: Copy attached.



COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
SOUTHEAST REGIONAL OFFICE

ARGEO PAUL CELLUCCI
Governor

TRUDY COXE
Secretary

DAVID B. STRUHS
Commissioner

June 25, 1998

Mr. Millard Joseph Landry Jr.
Plymouth Water Company
133 Raymond Road
Plymouth, Massachusetts 02360

RE: PLYMOUTH-Public Water Supply
Comprehensive Compliance
Evaluation: Sanitary Survey
PWS ID #4239045

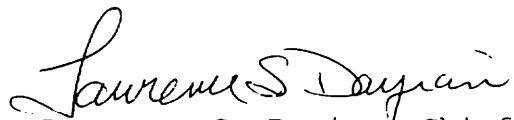
Dear Mr. Landry:

On June 2, 1998, a Comprehensive Compliance Evaluation (Sanitary Survey) of the above-referenced public water system was conducted by the Department of Environmental Protection (DEP). A sanitary survey is an on-site review of the public water system (sources, distribution system, treatment facilities, operations and maintenance, and administration) for the purpose of assessing the condition of the system and its ability to meet compliance with the regulations for providing safe drinking water.

Any deficiencies which were discovered in the course of this survey with regard to DEP standards, guidelines, and policies or violations of the Drinking Water Regulations are listed in the attached Findings and Inspection Report. The Department would expect you to take the required actions as indicated, for any noted deficiencies.

A debriefing meeting to review and discuss this information may be held, at your request. If you have any questions concerning the attached findings and inspection report, please contact Terry Martin at this office at (508) 946-2765.

Very truly yours,


Lawrence S. Dayian, Chief
South Coastal Basin

D/TM/cb

Enclosure: Water Management Act permit application
& Guidelines
Septic System information package
Financial Information

FACILITY INFORMATION: PLYMOUTH WATER COMPANY
133 RAYMOND ROAD
PLYMOUTH, MASSACHUSETTS
MR. JOE LANDRY

WATER COMMISSIONERS/LEGALLY RESPONSIBLE PARTIES:

MR. LAWRENCE LEBLANC	PRESIDENT
MR. DAVID LYNCH	TREASURER
MR. GREGORY LYNCH	
MR. WILLIAM R. LANDRY	

PLANT PERSONNEL PARTICIPATING IN THE CCE:

MR. JOE LANDRY, CERTIFIED OPERATOR	(508) 759-6877 WORK
	(508) 759-5497 HOME

DEP PERSONNEL PARTICIPATING IN THE CCE:

MS. TERRY MARTIN	SERO	(508) 946-2765
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COMPREHENSIVE COMPLIANCE EVALUATION

FINDINGS AND INSPECTION REPORT

SECTION I: ADMINISTRATION:

The Plymouth Water Company is managed by a Board of Directors which meets approximately four times per year. The day to day operation of the system is overseen by Mr. Joe Landry, certified operator for the system.

Mr. Landry has worked as the certified operator for the system since its construction in 1990-1991. Inspection of the system was conducted with Mr. Landry on June 2, 1998. Mr. Landry is a Grade 1C certified operator and has the authority to make operational decisions. Mr. Landry is the primary operator for the system and currently provides all system coverage. There is one part-time administrative position. The system is alarmed and Mr. Landry is notified through an emergency number.

The system, including communications, is currently being upgraded to incorporate corrosion control. The system currently consists of 299 metered

services, which include single family residences, an office and daycare and clubhouse for the Atlantic Country Club. At build-out, the system as designed supply a total of 820 homes.

The system allows opportunity for a variety of training. It should be noted that certified operator staffing requirements, 310 CMR 22.11B, identify this public water system as a Class 1-T, and the distribution system as a Class 1-D. The system was formerly classified as a Very Small System (VSS), however, due to population increase and the installation of corrosion control the system is now a Class 1-T. Mr. Landry's license is sufficient to meet the certification requirements for this system as the primary operator, however, a secondary operator is required for this system, in accordance with 310 CMR 22.11B(1).

It should be noted that as of January 1, 1996, operators and operators-in-training must complete continuing education as a prerequisite to certificate renewal, per 236 CMR 4.07(6). Budgeting for this training should be included in future annual budgets.

FINANCIAL INFORMATION

Please refer to the attached system financial information for an accounting of system expenses. Surplus funds are allocated to future development and long term maintenance of the system.

Rates and budgets are reviewed periodically and the information as provided on the Annual Statistical Report is current. The current water rate is \$25.00/quarter, and \$1.40/hundred cubic feet. There is also a \$2,000 fee for hook-up to the system. The last rate increase was in 1992 and there are no planned increases. The system is regulated by the Department of Public Utilities.

The system has not received subsidized grants and/or loans from state and/or federal resources in the past.

SECTION II: OPERATION AND MAINTENANCE

The system has a planned maintenance program which schedules items for routine inspection and maintenance. Pump maintenance is conducted yearly and pumps and valves are serviced as needed. Master meter calibration is was recently performed. Operation and maintenance manuals for equipment are available.

The spare parts inventory is sufficient to prevent long delays in equipment repairs. A good supply of repair parts for distribution system

repairs are keep on hand. A standby diesel-powered generator is available and tested weekly.

Outside support/contractors are available for assistance and Dufresne-Henry provides primary consulting services. Contractors used include D.L. Maher, Underwater Solutions and M&M Fleet Services.

The system currently receives its water from one (1) pumping station and one (1) storage tank. A description of the components is provided below:

1. Well #1 - 4239045-01G

This well was installed in January of 1988 and the station was approved for construction on August 15, 1988. The well is a 32"x18" 126 foot deep gravel-packed well with 25 feet of 0.040 slot #304 stainless steel screen. The well utilizes a 340 gallons per minute (gpm) constant speed pump. There are three 700 gpm high lift pumps designed to maintain system pressure. A two million gallon concrete storage tank is located adjacent to the pumping station which receives water from the well. This water is then pumped from the tank via the high lift pumps to the distribution system.

2. Well #2 - 4239045-02G

This well was installed in 1974, when the property was owned by Heritage Hills Corporation, the previous developer. A prolonged pumping test was conducted at 1,600 gpm and the well was approved by the Department of Public Health in 1975. The well was then proposed to be used as the back up supply for the current development. In a letter dated January 8, 1990, the Department approved a proposal to conduct a prolonged pumping test at a rate of 700 gpm and to incorporate the requirements of new source approval (i.e. water quality testing and Zone II delineation) to comply with the Department's Guidelines and Policies for Public Water Systems.

On February 5, 1991 the Department approved the use of this well, and the delineation of its corresponding Zone II, at a rate of 720 gpm. The well is a 24"x18" 138 foot deep gravel-packed well with 30 feet of 0.045 slot stainless steel screen. The well is currently capped and has not been utilized.

SECTION III: TREATMENT

The system does not currently treat, however the Department has approved a desk top evaluation for corrosion control, and construction of the treatment system is near completion. The treatment system will consist of injection of 45% potassium hydroxide (KOH) via chemical metering pumps. The treatment equipment, bulk storage, day tanks and feeding system have been constructed within an adequate spill containment area within the existing pumping station. Final inspection of the completed construction is pending.

SECTION IV: DISTRIBUTION

The distribution system consists of approximately 5 miles of PVC water mains ranging in size from 6" to 12". The entire system is flushed as needed and cul-de-sacs are periodically flushed. There is an up-to-date distribution map available and there is adequate pressure throughout the system. The storage tank for the system cannot be taken off line and was last cleaned in 1997. The tank overflow is screened.

SECTION V: DISTRIBUTION SYSTEM PROTECTION: CROSS CONNECTIONS

The system has an approved cross connection program and a cross connection survey has been performed. Backflow prevention devices have been installed at the day care facility and golf course clubhouse. These devices are inspected and tested by Greg Santos, a certified tester for the Town of Plymouth.

SECTION VI: EMERGENCY PLANS

The system has not experienced any water quality/quantity emergencies due to lack of supply, contaminant detections, etc. An emergency contingency plan has been prepared and a copy submitted to the Department. The back-up supply well is not currently available, however there is sufficient storage capacity to meet regulatory requirements for community systems.

SECTION VII: WATER QUANTITY

Under the Water Management Act (WMA) permitting process, the system is currently below the threshold, an average of 100,000 gallons per day, at which a permit is required. According to the 1997 Annual Statistical Report, the average day withdrawal was 95,555 gallons per day. However, based on the anticipated construction of additional homes, a permit will be needed at some point during the coming year. A permit application has been enclosed with this report, and should be submitted to the Department for approval. The Department recommends that the permit application include

both withdrawal points (Well #1 and Well #2). These wells have been approved at rates of 400 and 720 gallons per minute, respectively.

SECTION VIII: WATER QUALITY

The system has a copy of its water quality sampling schedule for monitoring and maintains a sample/location plan for bacteria and lead and copper sampling.

The system has submitted a lead and copper sampling schedule, and completed the required distribution system sampling. Construction of a corrosion control treatment system is presently nearing completion.

The system has applied for a waiver from testing requirements for synthetic organic compounds (SOCs) which is under review at this time at Well #1. The system is eligible to apply for a waiver from testing requirements for volatile organic compounds (VOCs), and a waiver application package will be forwarded under separate cover.

The sources which serve this system have received exemptions from microscopic particulate analysis (MPA) testing.

There have been no Maximum Contaminant Level (MCL) violations for this system.

SECTION IX: RESOURCE PROTECTION

The Zone I of each of the sources is owned by the system, and within each Zone I there are no conflicting land uses.

The condition of the pumping station is excellent. The interior is clean and well kept. Secondary containment and appropriate safety equipment is provided for corrosion control chemicals stored at the station. A diesel generator with day tank also has secondary containment and a rupture basin to prevent a release, as well as an overfill alarm.

Land uses within the Zone II for Well #1 and Well #2 consist primarily of single family residential property and an easement for ComElectric. Information has been obtained on pesticide/herbicide usage for brush control along the easement. No chemicals are applied to low growing shrubs, bushes or grasses, and chemical application is done directly to the trunks of trees along the power lines. A listing of chemicals used for basal application was provided and includes the regulated compounds 2,4-D, 2,4,5-T and picloram. These compounds were analyzed as part of the waiver application process for synthetic organic compounds and were not found to be present in the

groundwater. There are no documented hazardous waste sites in proximity to the water supplies.

The residential property is served by individual septic systems and therefore the possibility of a release of hazardous materials through the septic systems exists. Enclosed are fact sheets describing septic system additives and their potential to contaminate groundwater. This information may be distributed to the residences within the Zone II areas.

The system currently meets all aspects of required wellhead protection measures. For this system these requirements included petitioning the Town of Plymouth to adopt zoning controls within the Zone IIs of Well #1 and Well #2. The town has adopted these areas and included them as part of their aquifer protection district.

SECTION X: FUTURE REGULATORY REQUIREMENTS

The system has complied with newly promulgated regulations, and future regulatory compliance is anticipated.

I

**Deficiencies/Recommended
Actions - Based on regulations
guidelines and policies**

1. A Water Management Act permit must be completed and approved by the Department for Well #1 and Well #2. This permit should be filed as soon as possible, as system withdrawal is approaching the threshold of 100,000 gallons per day.
2. A secondary certified operator must be contracted to comply with the requirements of 310 CMR 22.11B(1).

II

Action Plan

1. Submit the enclosed Water Management Act permit application to this office for approval of the withdrawal volumes at Well #1 and Well #2.
2. Within 120 days, contract with a certified operator to meet the secondary certified operator requirements of 310 CMR 22.11B(1) and notify the Department in writing.